

# Jacques-E Moser

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11942251/publications.pdf>

Version: 2024-02-01

69  
papers

12,198  
citations

53751

45  
h-index

95218

68  
g-index

71  
all docs

71  
docs citations

71  
times ranked

11159  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrochemical Impedance Spectroscopic Analysis of Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , 2005, 109, 14945-14953.	1.2	1,855
2	Dye-sensitized solar cells for efficient power generation under ambient lighting. <i>Nature Photonics</i> , 2017, 11, 372-378.	15.6	871
3	Unravelling the mechanism of photoinduced charge transfer processes in lead iodide perovskite solar cells. <i>Nature Photonics</i> , 2014, 8, 250-255.	15.6	648
4	A New Ionic Liquid Electrolyte Enhances the Conversion Efficiency of Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , 2003, 107, 13280-13285.	1.2	607
5	A cobalt complex redox shuttle for dye-sensitized solar cells with high open-circuit potentials. <i>Nature Communications</i> , 2012, 3, 631.	5.8	554
6	High Molar Extinction Coefficient Heteroleptic Ruthenium Complexes for Thin Film Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> , 2006, 128, 4146-4154.	6.6	538
7	An organic redox electrolyte to rival triiodide/iodide in dye-sensitized solar cells. <i>Nature Chemistry</i> , 2010, 2, 385-389.	6.6	510
8	Significant Improvement of Dye-Sensitized Solar Cell Performance by Small Structural Modification in $\pi$ -Conjugated Donor-Acceptor Dyes. <i>Advanced Functional Materials</i> , 2012, 22, 1291-1302.	7.8	404
9	Coll(dbbip) $^{2+}$ Complex Rivals Tri-iodide/Iodide Redox Mediator in Dye-Sensitized Photovoltaic Cells. <i>Journal of Physical Chemistry B</i> , 2001, 105, 10461-10464.	1.2	402
10	Charge Separation and Efficient Light Energy Conversion in Sensitized Mesoscopic Solar Cells Based on Binary Ionic Liquids. <i>Journal of the American Chemical Society</i> , 2005, 127, 6850-6856.	6.6	383
11	A Solvent-Free, SeCN $^-$ /(SeCN) $_3^-$ -Based Ionic Liquid Electrolyte for High-Efficiency Dye-Sensitized Nanocrystalline Solar Cells. <i>Journal of the American Chemical Society</i> , 2004, 126, 7164-7165.	6.6	364
12	Cooperative Effect of Adsorbed Cations and Iodide on the Interception of Back Electron Transfer in the Dye Sensitization of Nanocrystalline TiO $_2$ . <i>Journal of Physical Chemistry B</i> , 2000, 104, 1791-1795.	1.2	341
13	An Alternative Efficient Redox Couple for the Dye-Sensitized Solar Cell System. <i>Chemistry - A European Journal</i> , 2003, 9, 3756-3763.	1.7	304
14	Long-Lived Photoinduced Charge Separation and Redox-Type Photochromism on Mesoporous Oxide Films Sensitized by Molecular Dyads. <i>Journal of the American Chemical Society</i> , 1999, 121, 1324-1336.	6.6	253
15	Real-Time Observation of Photoinduced Adiabatic Electron Transfer in Strongly Coupled Dye/Semiconductor Colloidal Systems with a 6 fs Time Constant. <i>Journal of Physical Chemistry B</i> , 2002, 106, 6494-6499.	1.2	239
16	Copper Bipyridyl Redox Mediators for Dye-Sensitized Solar Cells with High Photovoltage. <i>Journal of the American Chemical Society</i> , 2016, 138, 15087-15096.	6.6	239
17	Enhanced Electron Collection Efficiency in Dye-Sensitized Solar Cells Based on Nanostructured TiO $_2$ Hollow Fibers. <i>Nano Letters</i> , 2010, 10, 1632-1638.	4.5	234
18	11% efficiency solid-state dye-sensitized solar cells with copper(II/I) hole transport materials. <i>Nature Communications</i> , 2017, 8, 15390.	5.8	229

#	ARTICLE	IF	CITATIONS
19	Rationale for Kinetic Heterogeneity of Ultrafast Light-Induced Electron Transfer from Ru(II) Complex Sensitizers to Nanocrystalline TiO <sub>2</sub> . <i>Journal of the American Chemical Society</i> , 2005, 127, 12150-12151.	6.6	213
20	A molecular photosensitizer achieves a Voc of 1.24 V enabling highly efficient and stable dye-sensitized solar cells with copper(II/I)-based electrolyte. <i>Nature Communications</i> , 2021, 12, 1777.	5.8	196
21	Charge Separation in Solid-State Dye-Sensitized Heterojunction Solar Cells. <i>Journal of the American Chemical Society</i> , 1999, 121, 7445-7446.	6.6	195
22	Stable, High-Efficiency Ionic-Liquid-Based Mesoscopic Dye-Sensitized Solar Cells. <i>Small</i> , 2007, 3, 2094-2102.	5.2	191
23	Ion Coordinating Sensitizer for High Efficiency Mesoscopic Dye-Sensitized Solar Cells: Influence of Lithium Ions on the Photovoltaic Performance of Liquid and Solid-State Cells. <i>Nano Letters</i> , 2006, 6, 769-773.	4.5	161
24	Molecular Engineering of a Fluorene Donor for Dye-Sensitized Solar Cells. <i>Chemistry of Materials</i> , 2013, 25, 2733-2739.	3.2	154
25	Comprehensive control of voltage loss enables 11.7% efficient solid-state dye-sensitized solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 1779-1787.	15.6	148
26	The Effect of Hole Transport Material Pore Filling on Photovoltaic Performance in Solid-State Dye-Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2011, 1, 407-414.	10.2	130
27	Amphiphilic Ruthenium Sensitizer with 4,4'-Diphosphonic Acid-2,2'-bipyridine as Anchoring Ligand for Nanocrystalline Dye Sensitized Solar Cells. <i>Journal of Physical Chemistry B</i> , 2004, 108, 17553-17559.	1.2	105
28	New pyrido[3,4-b]pyrazine-based sensitizers for efficient and stable dye-sensitized solar cells. <i>Chemical Science</i> , 2014, 5, 206-214.	3.7	102
29	Femtosecond Dynamics of Interfacial and Intermolecular Electron Transfer at Eosin-Sensitized Metal Oxide Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2003, 107, 3215-3224.	1.2	98
30	Energy and Hole Transfer between Dyes Attached to Titania in Cosensitized Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> , 2011, 133, 10662-10667.	6.6	96
31	Dissociation of Charge Transfer States and Carrier Separation in Bilayer Organic Solar Cells: A Time-Resolved Electroabsorption Spectroscopy Study. <i>Journal of the American Chemical Society</i> , 2015, 137, 8192-8198.	6.6	86
32	Ligand Engineering for the Efficient Dye-Sensitized Solar Cells with Ruthenium Sensitizers and Cobalt Electrolytes. <i>Inorganic Chemistry</i> , 2016, 55, 6653-6659.	1.9	80
33	Butyronitrile-Based Electrolyte for Dye-Sensitized Solar Cells. <i>Journal of the American Chemical Society</i> , 2011, 133, 13103-13109.	6.6	75
34	A Close Look at Charge Generation in Polymer:Fullerene Blends with Microstructure Control. <i>Journal of the American Chemical Society</i> , 2015, 137, 2908-2918.	6.6	75
35	The fate of electron-hole pairs in polymer:fullerene blends for organic photovoltaics. <i>Nature Communications</i> , 2016, 7, 12556.	5.8	68
36	Engineering of thiocyanate-free Ru(ii) sensitizers for high efficiency dye-sensitized solar cells. <i>Chemical Science</i> , 2013, 4, 2423.	3.7	67

#	ARTICLE	IF	CITATIONS
37	Extraordinarily Efficient Conduction in a Redox-Active Ionic Liquid. <i>ChemPhysChem</i> , 2011, 12, 145-149.	1.0	65
38	Effect of Extended $\pi$ -Conjugation of the Donor Structure of Organic Dyes on the Photovoltaic Performance of Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014, 118, 16486-16493.	1.5	63
39	Towards Compatibility between Ruthenium Sensitizers and Cobalt Electrolytes in Dye-Sensitized Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 8731-8735.	7.2	61
40	Phenanthrene-Fused Quinoxaline as a Key Building Block for Highly Efficient and Stable Sensitizers in Copper Electrolyte-Based Dye-Sensitized Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 9324-9329.	7.2	59
41	Influence of Iodide Concentration on the Efficiency and Stability of Dye-Sensitized Solar Cell Containing Non-Volatile Electrolyte. <i>ChemPhysChem</i> , 2009, 10, 1834-1838.	1.0	54
42	Influence of the Anchoring Modes on the Electronic and Photovoltaic Properties of Dyes. <i>Journal of Physical Chemistry C</i> , 2012, 116, 16876-16884.	1.5	53
43	Photoinduced Interfacial Electron Injection Dynamics in Dye-Sensitized Solar Cells under Photovoltaic Operating Conditions. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 3786-3790.	2.1	52
44	Position-Dependent Extension of $\pi$ -Conjugation in D-A Dye Sensitizers and the Impact on the Charge-Transfer Properties. <i>Journal of Physical Chemistry C</i> , 2013, 117, 13805-13815.	1.5	50
45	Unravelling the Potential for Dithienopyrrole Sensitizers in Dye-Sensitized Solar Cells. <i>Chemistry of Materials</i> , 2013, 25, 2642-2648.	3.2	49
46	Effect of Coordination Sphere Geometry of Copper Redox Mediators on Regeneration and Recombination Behavior in Dye-Sensitized Solar Cell Applications. <i>ACS Applied Energy Materials</i> , 2018, 1, 4950-4962.	2.5	49
47	Application of Cu(ii) and Zn(ii) coproporphyrins as sensitizers for thin film dye sensitized solar cells. <i>Energy and Environmental Science</i> , 2010, 3, 956.	15.6	37
48	Dynamics of Photoinduced Interfacial Electron Transfer and Charge Transport in Dye-Sensitized Mesoscopic Semiconductors. <i>Chimia</i> , 2007, 61, 631.	0.3	35
49	Dynamics of Interfacial Charge Transfer States and Carriers Separation in Dye-Sensitized Solar Cells: A Time-Resolved Terahertz Spectroscopy Study. <i>Journal of Physical Chemistry C</i> , 2015, 119, 26266-26274.	1.5	31
50	Blue Photosensitizer with Copper(II/I) Redox Mediator for Efficient and Stable Dye-Sensitized Solar Cells. <i>Advanced Functional Materials</i> , 2020, 30, 2004804.	7.8	30
51	Kinetics of the Regeneration by Iodide of Dye Sensitizers Adsorbed on Mesoporous Titania. <i>Journal of Physical Chemistry C</i> , 2014, 118, 17108-17115.	1.5	26
52	Later rather than sooner. <i>Nature Materials</i> , 2005, 4, 723-724.	18.3	25
53	Liquid State and Zombie Dye Sensitized Solar Cells with Copper Bipyridine Complexes Functionalized with Alkoxy Groups. <i>Journal of Physical Chemistry C</i> , 2020, 124, 7071-7081.	1.5	24
54	Temperature-Dependent Ordering Phenomena of a Polyiodide System in a Redox-Active Ionic Liquid. <i>Journal of Physical Chemistry C</i> , 2012, 116, 7989-7992.	1.5	23

#	ARTICLE	IF	CITATIONS
55	Dynamics of Photocarrier Separation in MAPbI <sub>3</sub> Perovskite Multigrain Films under a Quasistatic Electric Field. <i>Journal of Physical Chemistry C</i> , 2016, 120, 19595-19602.	1.5	22
56	Ultrafast charge separation dynamics in opaque, operational dye-sensitized solar cells revealed by femtosecond diffuse reflectance spectroscopy. <i>Scientific Reports</i> , 2016, 6, 24465.	1.6	22
57	Effect of Posttreatment of Titania Mesoscopic Films by TiCl <sub>4</sub> in Solid-State Dye-Sensitized Solar Cells: A Time-Resolved Spectroscopy Study. <i>Journal of Physical Chemistry C</i> , 2012, 116, 26721-26727.	1.5	20
58	Conduction Through Viscoelastic Phase in a Redox-Active Ionic Liquid at Reduced Temperatures. <i>Advanced Materials</i> , 2012, 24, 781-784.	11.1	17
59	Investigation of Interfacial Charge Separation at PbS QDs/(001) TiO <sub>2</sub> Nanosheets Heterojunction Solar Cell. <i>Particle and Particle Systems Characterization</i> , 2015, 32, 483-488.	1.2	17
60	Phenanthrene-Fused Quinoxaline as a Key Building Block for Highly Efficient and Stable Sensitizers in Copper-Electrolyte-Based Dye-Sensitized Solar Cells. <i>Angewandte Chemie</i> , 2020, 132, 9410-9415.	1.6	17
61	Unraveling the Dual Character of Sulfur Atoms on Sensitizers in Dye-Sensitized Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 26827-26833.	4.0	16
62	Charge separation and carrier dynamics in donor-acceptor heterojunction photovoltaic systems. <i>Structural Dynamics</i> , 2017, 4, 061503.	0.9	13
63	Lateral Intermolecular Electronic Interactions of Diketopyrrolopyrrole Dye Sensitizers Adsorbed on Mesoporous Alumina. <i>Journal of Physical Chemistry C</i> , 2018, 122, 19348-19358.	1.5	9
64	A tandem redox system with a cobalt complex and 2-azaadamantane-N-oxyl for fast dye regeneration and open circuit voltages exceeding 1 V. <i>Journal of Materials Chemistry A</i> , 2019, 7, 10998-11006.	5.2	8
65	On the kinetics and mechanism of light-induced electron transfer at the semiconductor/electrolyte interface. <i>Solar Energy Materials and Solar Cells</i> , 1995, 38, 343-345.	3.0	7
66	Donor Effect on the Photoinduced Interfacial Charge Transfer Dynamics of Diketopyrrolopyrrole Dye Sensitizers Adsorbed on Titanium Dioxide. <i>Journal of Physical Chemistry C</i> , 2018, 122, 19359-19369.	1.5	7
67	Electron donor-acceptor distance dependence of the dynamics of light-induced interfacial charge transfer in the dye-sensitization of nanocrystalline oxide semiconductors. , 2006, , .		3
68	Using the Stark effect to understand charge generation in organic solar cells. <i>Proceedings of SPIE</i> , 2015, , .	0.8	1
69	Conductivity in Dye-Sensitized TiO <sub>2</sub> probed by Optical-Pump THz-Probe Spectroscopy. , 2010, , .		0